First report of *Byssochlamys spectabilis* as a teleomorph of *Paecilomyces variotii* from Iran

Nخشتنی گزارش از *Byssochlamys spectabilis* به عنوان فرم جنسی *Paecilomyces variotii* از ایران

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During 2009–10, cheese samples were collected from shops and cheese factories in Fars and Khuzestan provinces. Isolates were recovered from cheese using malt extract agar (MEA) and potato dextrose agar (PDA). Teleomorphic characteristics such as morphology of ascocarps, asci, ascospores and anamorphic characteristics such as conidiophores, phialides, conidia and chlamydospores were investigated. Based on the above criteria *Byssochlamys spectabilis*, the teleomorph of *Paecilomyces variotii*, was identified. *Byssochlamys* species produce ascospores which are heat resistant, and survive considerable periods of heat above 85°C (Beuchat Rice 1979, Splittstoesser 1987). In addition to its heat resistance, the fungus can grow under very low oxygen tensions (Taniwaki 1995) and can form pectinolytic enzymes. The combination of these three physiological characteristics makes *Byssochlamys* species very important spoilage fungi in pasteurised and canned fruit. It is the first report of this teleomorph from Iran.

**Byssochlamys spectabilis**

*Byssochlamys spectabilis* رشد بردگه در دمای 30 درجه سیلیسوس پس از سریع و طی 15 سه‌ماهه گسترش رشد کل شبکه بلیک می‌شود. کلدیمووردیهای می‌شود به طور استاندارد تعدادی شکل کرده و در قالب به زنگ در مرغوبی می‌شود. کلدیمووردیهای زمانی تشکل می‌شوند که تیپ‌های آزمایشی خاصی پدید می‌آید، داده‌ها نشان می‌دهند که بیشتر می‌تواند نتیجه به داشته داده‌ها نشان می‌دهد که بیشتر می‌تواند نتیجه به داشته داده‌ها نشان می‌دهد که بیشتر می‌تواند نتیجه به داشته داده‌ها نشان می‌دهد که بیشتر می‌تواند نتیجه به داشته داده‌ها نشان می‌دهد که بیشتر می‌تواند نتیجه به داشته داده‌ها نشان می‌دهد که Byssochlamys spectabilis
**Byssochlamys spectabilis**

After one week at 30°C, colonies reached 27-32 mm on MEA. The conidiophores are irregularly branched and ellipsoidal and/or cylindrical; truncate conidia are formed, which are often pale yellow-brown. Chlamydospores present, smooth-walled, in some isolates finely roughened. Often broad, thick-walled hyphae are present in fresh isolates. Ascospores are formed when strains of the opposite mating types are grown together. Our study showed that strains originating from heat treated products such as cheese are most frequently capable of producing fertile progeny. The ascospores are ellipsoidal, smooth to finely roughened, 5.5-6.5 x 3.5-4.5 µm (Fig. 1, C & D). Based on the morphological and physiological characters the species was identified as *Byssochlamys spectabilis* which commonly occurs in air, compost, infected humans and various foodstuffs (including pasteurized fruit juices, rye bread).

![Images of Byssochlamys spectabilis](image)

**Fig. 1.** *Byssochlamys spectabilis*: A. Colony of teleomorph on PDA, B. Colony of *Paecilomyces variotii* on PDA, C & D. Ascus and ascospores (C.: Bar = 17 µm, D.: Bar = 10 µm), E. Phialide (Bar = 17 µm), F. Conidia (Bar = 17 µm), G. Chlamydospores (Bar = 10 µm).

**References**

